

CONTACTLESS ENERGY TRANSFER APPARATUS

Abstract of the Disclosure

A flux generator base unit electromagnetically couples with a portable device to transfer energy into the portable device. The base unit includes one or more permanent magnets or flux shunts that are moved (e.g., by a motor) to produce a magnetic flux coupled to a receiver coil of the portable device. The receiver coil is disposed in an elongate housing and is electrically connected with the portable device. The disposition of the elongate housing ensures that magnetic flux directed to the receiver coil generally does not affect electronic components within the portable device. Either the permanent magnet(s) or flux shunt(s) are moved within the base unit to produce the varying magnetic flux that is coupled to the receiver coil. Preferably, the receiver coil is combined with any antenna employed by the portable device.